

CLAIMS

I claim:

1. A method of cleansing a filter, comprising;
providing a source of purified water; and
exposing the filter to the purified water.
2. The method of claim 1, wherein the filter includes a filter cartridge.
3. The method of claim 1, wherein the purified water includes water treated by a reverse osmosis, a steam distillation or a deionization process.
4. The method of claim 1, wherein the purified water includes water having a lower total dissolved solids reading than water being filtered.
5. The method of claim 1, wherein the purified water has a total dissolved solids reading at least fifty percent less than water being filtered.
6. The method of claim 1, wherein the purified water has a total dissolved solids reading at least eighty percent less than water being filtered.
7. The method of claim 1, wherein the purified water has a total dissolved solids reading at least ninety five percent less than water being filtered.
8. The method of claim 1, further comprising;
backflushing the filter with the purified water.
9. An apparatus for cleansing a filter, comprising:
a source of purified water; and
a container for the purified water to expose a filter to the purified water.
10. The apparatus of claim 9, wherein the container includes a tank for submersing the filter.

11. The apparatus of claim 9, wherein the container includes a pressurized source of purified water to cleanse the filter.
12. The apparatus of claim 11, wherein the container includes a pressurized source of purified water to backflush the filter.
13. The apparatus of claim 9, wherein the purified water includes water treated by a reverse osmosis, a steam distillation or a deionization process.
14. The apparatus of claim 9, wherein the purified water includes water having a lower total dissolved solids reading than water being filtered.
15. The apparatus of claim 9, wherein the purified water has a total dissolved solids reading at least fifty percent less than water being filtered.
16. The apparatus of claim 9, wherein the purified water has a total dissolved solids reading at least eighty percent less than water being filtered.
17. The apparatus of claim 9, wherein the purified water has a total dissolved solids reading at least ninety five percent less than water being filtered.
18. A filter backflush unit, comprising:
 - a filter, having an inlet end and an outlet end in a filtered flowpath;
 - a flush valve having an open and a closed position, coupled to the filtered flowpath after the outlet end;
 - a drain valve having an open and a closed position, coupled to the filtered flowpath before the inlet end;
 - an inlet valve having an open and a closed position in the filtered flowpath prior to the drain valve; and

a flush source containing water purified through a reverse osmosis, steam distillation or deionization process, wherein the flush source is coupled to the flush valve to allow a flow of the purified water to pass through the flush valve, into the outlet end of the filter, and backwards through the filter, therein exiting through the drain valve when the inlet valve is in a closed position and the flush valve and drain valve are in an open position.

19. The filter backflush unit recited in claim 18, wherein the flush valve, the inlet valve and the drain valve each comprise a solenoid operated flow control valve.
20. The filter backflush unit recited in claim 19, further comprising a controller adapted to control said inlet valve, said flush valve and said drain valve.
21. The filter backflush unit as recited in claim 20, wherein said controller comprises a microcontroller.
22. The filter backflush unit as recited in claim 21, wherein said controller is adapted to periodically operate said valves to execute a backflush routine.
23. A filter backflush unit, comprising:
 - a filter, having an inlet end and an outlet end in a filtered flowpath;
 - a flush valve having an open and a closed position, coupled to the filtered flowpath after the outlet end;
 - a drain valve having an open and a closed position, coupled to the filtered flowpath before the inlet end;
 - an inlet valve having an open and a closed position in the filtered flowpath prior to the drain valve; and

a flush source containing purified water having a total dissolved solids reading less than that of the water normally being filtered in the filtered flowpath, wherein the flush source is coupled to the flush valve to allow a flow of the purified water to pass through the flush valve, into the outlet end of the filter, and backwards through the filter, therein exiting through the drain valve when the inlet valve is in a closed position and the flush valve and drain valve are in an open position.

24. The filter backflush unit of claim 23, wherein the water used in the backflushing has a total dissolved solids reading at least fifty percent less than the total dissolved solids reading of the water being filtered in normal dispensing operations.
25. The filter backflush unit of claim 23, wherein the water used in the backflushing has a total dissolved solids reading at least eighty percent less than the total dissolved solids reading of the water being filtered in normal dispensing operations.
26. The filter backflush unit of claim 23, wherein the water used in the backflushing has a total dissolved solids reading at least ninety five percent less than the total dissolved solids reading of the water being filtered in normal dispensing operations.
27. The filter backflush unit recited in claim 23, wherein the flush valve, the inlet valve and the drain valve each comprise a solenoid operated flow control valve.
28. The filter backflush unit recited in claim 27, further comprising a controller adapted to control said inlet valve, said flush valve and said drain valve.
29. The filter backflush unit as recited in claim 28, wherein said controller comprises a microcontroller.
30. The filter backflush unit as recited in claim 28, wherein said controller is adapted to periodically operate said valves to execute a backflush routine.

31. A filter backflush unit comprising,
a primary flowpath; wherein the primary flowpath is used for normal dispensing operations; and
a secondary flowpath, wherein the filter backflush unit switches from the primary flowpath to the secondary flowpath to execute filter backflushing routines with a flow of water purified using a reverse osmosis, steam distillation or deionization process.
32. A filter backflush unit comprising,
a primary flowpath; wherein the primary flowpath is used for normal dispensing operations; and
a secondary flowpath, wherein the filter backflush unit switches from the primary flowpath to the secondary flowpath to execute filter backflushing routines with a flow of water having a total dissolved solids reading less than the total dissolved solids reading of the water being filtered in normal dispensing operations.
33. The filter backflush unit of claim 32, wherein the water used in the backflushing has a total dissolved solids reading at least fifty percent less than the total dissolved solids reading of the water being filtered in normal dispensing operations.
34. The filter backflush unit of claim 32, wherein the water used in the backflushing has a total dissolved solids reading at least eighty percent less than the total dissolved solids reading of the water being filtered in normal dispensing operations.
35. The filter backflush unit of claim 32, wherein the water used in the backflushing has a total dissolved solids reading at least ninety five percent less than the total dissolved solids reading of the water being filtered in normal dispensing operations.

36. A method for backflushing a filter, comprising;
- a. switching an inlet valve, a drain valve and a flush valve in a filtered flowpath from a primary flowpath used for dispensing operations to a secondary flowpath, therein allowing purified water into the filtered flowpath;
 - b. flowing the purified water in the secondary flowpath, wherein the secondary flowpath allows the purified water to flow backwards through the filter for a predetermined interval to remove or dissolve filtered media or unclog a filter in the primary flowpath; and
 - c. switching the inlet valve, the drain valve and the flush valve from the secondary flowpath to the primary flowpath to resume dispensing operations.
37. The method for backflushing a filter as recited in claim 36, further comprising;
- d. Repeating steps a.-c. to provide a continued cleansing of the filter medium.
38. The method of claim 36, wherein the purified water includes water treated by a reverse osmosis, a steam distillation or a deionization process.
39. The method of claim 36, wherein the purified water includes water having a lower total dissolved solids reading than water being filtered.
40. The method of claim 36, wherein the purified water has a total dissolved solids reading at least fifty percent less than water being filtered.
41. The method of claim 36, wherein the purified water has a total dissolved solids reading at least eighty percent less than water being filtered.
42. The method of claim 36, wherein the purified water has a total dissolved solids reading at least ninety five percent less than water being filtered.